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STIC Database Tracking Number: 136179

TO: Alton Pryor

Location: Rem 4A39

Art Unit: 1616 October 26, 2004 (4cm)

Case Serial Number: 09/890384

From: P. Sheppard

Location: Remsen Building

Phone: (571) 272-2529

sheppard@uspto.gov

Search Notes		
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=> fil hcaplus FILE 'HCAPLUS' ENTERED AT 11:40:03 ON 26 OCT 2004 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 26 Oct 2004 VOL 141 ISS 18 FILE LAST UPDATED: 25 Oct 2004 (20041025/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L1 STR

7 Gl 1 C C 3 C 0
6 C C 4 8 C C 01
5 N 0 0
12 11

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VAR G1=13/10 NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 14

STEREO ATTRIBUTES: NONE L3 2644 SEA FILE=REGISTRY SSS FUL L1 L4554 SEA FILE=HCAPLUS ABB=ON PLU=ON L3 66069 SEA FILE=HCAPLUS ABB=ON PLU=ON ("WEED CONTROL"/CV OR "WEED L5CONTROL (HERBICIDAL) "/CV OR WEEDICIDES/CV OR "GROWTH INHIBITORS , PLANT"/CV OR HERBICIDES/CV OR "HORMONES, PLANT"/CV OR MULCHES/CV OR WEED/CV) PLU=ON "WEED CONTROL (HERBICIDAL)"+AL 19756 SEA FILE=HCAPLUS ABB=ON L6 L/CV (HERBICIDES/CV OR "WEED 58647 SEA FILE=HCAPLUS ABB=ON PLU=ON L7CONTROL"/CV) $\Gamma8$ 215 SEA FILE=HCAPLUS ABB=ON PLU=ON L4 AND (L5 OR L6 OR L7) 3 SEA FILE=HCAPLUS ABB=ON PLU=ON L8 AND ?CAPSUL? L9

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L9

PUBLISHER:

=> d ibib abs hitstr 19 1-3

ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN

2002:26966 HCAPLUS ACCESSION NUMBER:

136:290459 DOCUMENT NUMBER:

New synergistic and selective herbicide compositions TITLE:

AUTHOR(S): CORPORATE SOURCE:

Research Disclosure (2001), 452 (Dec.), P2044 (No. SOURCE:

452061)

CODEN: RSDSBB; ISSN: 0374-4353 Kenneth Mason Publications Ltd.

Journal; Patent DOCUMENT TYPE:

English LANGUAGE:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RD 452061		20011210		

PRIORITY APPLN. INFO .:

RD 2001-452061 20011210

New herbicidal compns. have been found which are suitable for controlling a broad range of weeds in cultures of useful plants, in particular wheat or corn. Both monocot and dicot weeds may be controlled with the use of these compns. The compns. are suitable for use on both unmodified crops and those that are either naturally herbicide tolerant or have been modified to be tolerant to one or both of the herbicides in the compns. The compns. contain, beside standard formulation materials such as diluents, surfactants or adjuvants, a mixture of active ingredients comprising (1) 2-(2'-nitro-4'-mcthylsulfonylbenzoyl)-1,3-cyclohexane dione (mesotrione) and (2) a herbicidally effective amount of at least one further co-herbicide selected from the group consisting of bromoxynil, fluthiacet-Me, EPTC, halosulfuron-Me, clopyralid, diflufenzopyr, flumiclorac-pentyl, 2,4-D, bentazone, carfentrazone-Et, fluroxypyr, isoxaflutole, isoxachlortole, metosulam, sethoxydim, sulfentrazone, thifensulfuron-Me, cyanazine, fentrazamide, MCPA, MCPB, MCPP, mecoprop, metobenzuron, pethoxamid, profluazol and sulcotrione, isoxaflutole. The compns. can be used in a method for selectively controlling broadleaf weeds in useful plant cultures, in particular wheat or corn, which method comprises treating the useful plants, their seeds or a locus thereof at the same time or successively with mesotrione and the co-herbicide listed - above. application rate is usually between 0.001 to 2.0 kg/ha of mesotrione, preferably from 0.005 to I kg/ha, and between 0.001 to 2.0 kg/ha of coherbicide, preferably 0.005 to I kg/ha. For application to the crops, the compns. of mesotrione with the co-herbicides may be applied together with the additives in formulations such as emulsion concs., brushable pastes, directly sprayable or dilutable solns., diluted emulsions, wettable powders, soluble powders, dusts, granules, or capsules. compns. may also contain further additives such as stabilizers, antifoaming agents, viscosity modulators, as well as a safener, a further herbicide, a fungicide or an insecticide, or fertilizers or other active substances for achievement of special effects.

406921-65-1, Mesotrione-isoxaflutole mixture 406921-66-2,

Mesotrione-isoxachlortole mixture

RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses) (synergistic and selective herbicide compns. containing)

406921-65-1 HCAPLUS

ΙT

RN

CN

1,3-Cyclohexanedione, 2-[4-(methylsulfonyl)-2-nitrobenzoyl]-, mixt. with (5-cyclopropyl-4-isoxazolyl)[2-(methylsulfonyl)-4-(trifluoromethyl)phenyl]methanone (9CI) (CA INDEX NAME)

CM 1

CRN 141112-29-0 CMF C15 H12 F3 N O4 S

CM 2

CRN 104206-82-8 CMF C14 H13 N O7 S

406921-66-2 HCAPLUS

1,3-Cyclohexanedione, 2-[4-(methylsulfonyl)-2-nitrobenzoyl]-, mixt. with [4-chloro-2-(methylsulfonyl)phenyl] (5-cyclopropyl-4-isoxazolyl)methanone (9CI) (CA INDEX NAME)

CM 1

RN

CN

CRN 141112-06-3

CMF C14 H12 C1 N O4 S

CM

104206-82-8 CRN CMF C14 H13 N O7 S

ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN L9

ACCESSION NUMBER:

2000:742211 HCAPLUS

DOCUMENT NUMBER:

133:323305

TITLE:

INVENTOR(S):

Active-substance vector multiparticulate system,

production and use thereof

Prud'homme, Christian; Fleury, Etienne; Michalon,

Jean-Paul; Zerrouk, Robert

PATENT ASSIGNEE(S): SOURCE:

Rhodia Chimie, Fr.; Aventis CropScience PCT Int. Appl., 76 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

French

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PAT	PATENT NO.				KIN	D	DATE			APPL	ICAT		DATE				
						_									_		
WO	2000	0617	14		A1		2000	1019	1	WO 2	000-	FR94	0		2	0000	412
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CR,
		CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,	GM,	HR,	HU,
		ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KΡ,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,
		LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	ΝZ,	PL,	PT,	RO,	RU,	SD,	SE,
		SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZW,
		AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM							
	RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SL,	SZ,	TZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,	DE,
		DK,	ES,	FI,	FR,	GB,	GR,	IE,	ΙT,	LU,	MC,	NL,	PT,	SE,	BF,	ΒJ,	CF,
		CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG	•			
FR	2791	992			A1		2000	1013		FR 1	999-	4526		•	1	9990	412

FR 2791992 В1 20030613

EP 2000-918954 20000412 EP 1169425 20020109 Α1 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.: FR 1999-4526

WO 2000-FR940 W 20000412

A 19990412

The object of the invention is an active-substance vector multiparticulate AB system comprising one or several active substances enclosed in a hydrophilic organic matrix comprising at least one hydrosol. and/or hydrodispersible anionic polymer which is precipitated by metallic cations. Typical active substances are perfumes used in detergents and agrochems. Thus, homogenizing a dispersion containing 20 g di-Me 5-sodiosulfoisophthalatedi-Me terephthalate-ethylene glycol-isophthalic acid copolymer (I, mol. weight 60,000-65,000) and 80 g water with a dispersion containing 500 g I and Eagle 3000 (liquid perfume), spraying the mixture in to a 0.1 M CaCl2 solution, filtering, and drying as a fluidized bed 30 min at 37° gave a white powder.

ΙT 141112-29-0, Isoxaflutole

> RL: PEP (Physical, engineering or chemical process); PROC (Process) (herbicide; anionic polymer-encapsulated detergent perfumes and agrochems.)

141112-29-0 HCAPLUS RN

Methanone, (5-cyclopropyl-4-isoxazolyl)[2-(methylsulfonyl)-4-CN (trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN L9

ACCESSION NUMBER:

2000:553354 HCAPLUS

DOCUMENT NUMBER:

133:160851

TITLE:

Weed control by progressive or sequential delivery or

release of isoxazole herbicide

INVENTOR(S): PATENT ASSIGNEE(S): Roberts, David Alan; Zerrouk, Robert; Colegate, Rachel

Aventis Agriculture Limited, UK

SOURCE:

PCT Int. Appl., 30 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. _____ ---------______ -----WO 2000045637 20000810 WO 2000-EP1102 A1 20000201 W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,

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CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
             MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
             SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                                                     19990201
     GB 2346086
                                20000802
                                            GB 1999-2232
                          Α1
     GB. 2348809
                                20001018
                                             GB 1999-8313
                                                                    19990412
                          Α1
     EG 23013
                                             EG 2000-108
                          Α
                                20031231
                                                                    20000131
     CA 2358522
                                             CA 2000-2358522
                                20000810
                                                                    20000201
                          AA
     EP 1148784
                                             EP 2000-907543
                                                                    20000201
                                20011031
                          Α1
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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     BR 2000009134
                                20020205
                                             BR 2000-9134
                                                                    20000201
                          Α
                                             ZA 2001-5599
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                          Α
                                20021007
                                                                    20010706
     BG 105806
                                20020329
                                             BG 2001-105806
                          Α
                                                                    20010809
     HR 2001000643
                          Α1
                                20020831
                                             HR 2001-643
                                                                    20010831
PRIORITY APPLN. INFO.:
                                             GB 1999-2232
                                                                 A 19990201
                                             GB 1999-8313
                                                                 A 19990412
                                                                 W 20000201
                                             WO 2000-EP1102
```

AB A method for controlling weeds consists of sequential treating the soil with low rates of an isoxazole herbicide, or applying a sustained release encapsulated formulation of an isoxazole herbicide.

IT **141112-29-0**, Isoxaflutole

RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses) (weed control by progressive or sequential delivery or release of isoxazole herbicide)

RN 141112-29-0 HCAPLUS

CN Methanone, (5-cyclopropyl-4-isoxazolyl) [2-(methylsulfonyl)-4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

4

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):=> d stat que nos

L1 STR

L3 2644 SEA FILE=REGISTRY SSS FUL L1

L4 554 SEA FILE=HCAPLUS ABB=ON PLU=ON L3

L5 66069 SEA FILE=HCAPLUS ABB=ON PLU=ON ("WEED CONTROL"/CV OR "WEED CONTROL"/CV OR "HORMONES, PLANT"/CV OR

CONTROL (HERBICIDAL)"/CV OR WEEDICIDES/CV OR "GROWTH INHIBITORS , PLANT"/CV OR HERBICIDES/CV OR "HORMONES, PLANT"/CV OR

Pryor 09 890384

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MULCHES/CV OR WEED/CV)
                                                  "WEED CONTROL (HERBICIDAL)"+AL
          19756 SEA FILE=HCAPLUS ABB=ON
                                         PLU=ON
L6
                L/CV
                                                   (HERBICIDES/CV OR "WEED
L7
          58647 SEA FILE=HCAPLUS ABB=ON
                                          PLU=ON
                CONTROL"/CV)
L8
            215 SEA FILE=HCAPLUS ABB=ON
                                          PLU=ON
                                                  L4 AND (L5 OR L6 OR L7)
Ь9
                                                  L8 AND ?CAPSUL?
              3 SEA FILE=HCAPLUS ABB=ON
                                          PLU=ON
                                          PLU=ON
                                                  L4 AND AGROCHEM?
             12 SEA FILE=HCAPLUS ABB=ON
L15
             10 SEA FILE=HCAPLUS ABB=ON
                                          PLU=ON
                                                  L15 NOT L9
L16
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=> d ibib abs hitstr 116 1-10

L16 ANSWER 1 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2004:515477 HCAPLUS

DOCUMENT NUMBER:

141:54066

TITLE:

Preparation of benzoyl derivatives having sulfoximine

JP 2003-343392

A 20031001

group as herbicides

INVENTOR(S):

Kajita, Satoshi; Ohmura, Hideaki; Akashi, Masaya; Kojima, Shuichi; Satoh, Atsushi; Tomida, Kazuyuki

PATENT ASSIGNEE(S):

Nippon Soda Co., Ltd., Japan

SOURCE:

PCT Int. Appl., 94 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATI	PATENT NO.					KIND DATE			APPLICATION NO.						DATE				
WO 2	2004	0528	49		A1		2004	0624	1	WO 2	003-	JP15	843		2	0031	211		
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,		
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,		
		GE,	GH;	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KΡ,	KR,	ΚZ,	LC,		
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NI,	NO,		
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		TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW,	AM,		
		ΑZ,	BY,	KG,	ΚZ														
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		BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,		
		MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,		
		GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG										
PRIORITY	RIORITY APPLN. INFO.:									JP 2	002-	3606	45	1	A 2	0021	212		
									į	JP 2	003-	1084	5 4	1	A 2	0030	411		

OTHER SOURCE(S):

MARPAT 141:54066

GΙ

AB Title compds. I [wherein Q = (un)substituted 4-pyrazolyl, 2-oxophenyl, (alkylcarbonyl)cyanomethyl, 4-isoxazolyl, etc.; R1 = H, halo, (halo)alkyl, cyano, etc.; R2, R3 = independently (cyclo)alkyl, alkenyl, alkoxyalkyl, etc.; R4 = H, halo, alkoxy, nitro, etc.; R5 = H, halo, alkyl; and the benzoic acid derivs. or salts thereof] were prepared as herbicides. For example, substitution of Et 2-methyl-4-(methylsulfonyl)-3-trifluoromethylsulfonyloxybenzoate with 4-imino-1,4-oxathian-4-one (44%), followed by hydrolysis (89%) and the reaction with 1-methyl-3-pyrazolin-5-one hydrochloride (71%), gave II. I showed herbicidal activity of crabgrass, Echinochloa, abutilon, and other weeds, at 250 g/ha.

T 708257-07-2P 708257-08-3P 708257-09-4P

708257-07-2P 708257-08-3P 708257-09-4P
RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of benzoyl derivs. having sulfoximine group as herbicides) 708257-07-2 HCAPLUS

CN Sulfoximine, N-[3-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-2-methyl-6-(methylsulfonyl)phenyl]-S,S-dimethyl- (9CI) (CA INDEX NAME)

RN

RN 708257-08-3 HCAPLUS
CN Sulfoximine, N-[2-chloro-3-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-6(methylsulfonyl)phenyl]-S,S-dimethyl- (9CI) (CA INDEX NAME)

RN 708257-09-4 HCAPLUS
CN Sulfoximine, N-[2-chloro-3-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-6(methylsulfonyl)phenyl]-S,S-diethyl- (9CI) (CA INDEX NAME)

L16 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2003:42999 HCAPLUS

DOCUMENT NUMBER:

138:68344

TITLE:

Lignin-based microparticles for controlled release of

agrochemicals

INVENTOR(S):

Asrar, Jawed; Ding, Yiwei Monsanto Technology LLC, USA

PATENT ASSIGNEE(S):

U.S. Pat. Appl. Publ., 26 pp.

SOURCE:

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	PATENT NO.							ſ	,		ICAT				D.	ATE	
	2003 2003						2003 2003			US 2	002-	1917	03		_	0020 0020	
		AE, CO, GM,	AG, CR, HR,	AL, CU, HU,	AM, CZ, ID,	AT, DE, IL,	AU, DK, IN, MD,	AZ, DM, IS,	BA, DZ, JP,	BB, EC, KE,	BG, EE, KG,	BR, ES, KP,	BY, FI, KR,	BZ, GB, KZ,	CA, GD, LC,	CH, GE, LK,	CN, GH, LR,
·		UA, TJ,	UG, TM	US,	UZ,	VN,	SE, YU,	ZA,	ZM,	ZW,	AM,	AZ,	BY,	KG,	KΖ,	MD,	RU,
	RW:	CH, PT,	CY,	CZ, SK,	DE, TR,	DK,	MZ, EE, BJ,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,
EP	1404	•	•	,			2004	0407	EP 2002-748113						2	0020	710
	R:						ES, RO,									MC,	PT,
	BR 2002010948 PRIORITY APPLN. INFO.:				Α		2004	0608	BR 2002-10948 US 2001-304554P WO 2002-US21722					1	P 20010711		

AB A method of producing lignin-based matrix microparticles for the controlled release of an agricultural active includes forming an emulsion of an organic solution in an aqueous solution, wherein the organic solution contains a lignin

derivative and an agricultural active in a volatile organic solvent and the aqueous solution contains an emulsifier; and removing the organic solvent, thereby producing microparticles having a matrix comprising the lignin derivative within which the agricultural active is distributed. Small, spherical lignin-based matrix microparticles that release an agricultural active at

a controlled rate are described, as are plants and plant propagation materials that are treated with such microparticles.

IT **141112-29-0**, Isoxaflutole

RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)

(lignin-based microparticles for controlled release of)

RN 141112-29-0 HCAPLUS

CN Methanone, (5-cyclopropyl-4-isoxazolyl)[2-(methylsulfonyl)-4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

L16 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2002:777596 HCAPLUS

DOCUMENT NUMBER:

137:274424

TITLE:

Coformulation of an oil-soluble herbicide and a

water-soluble herbicide

INVENTOR(S):

Jimoh, Ganiyu A.

PATENT ASSIGNEE(S):

Monsanto Technology LLC, USA PCT Int. Appl., 74 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

5

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.						KIND DATE					ICAT		DATE					
		2002						2002		1						2	0020:	214	
	WO															~~	~	~	
		W:						AU,											
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,	
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KΡ,	KR,	ΚZ,	LC,	LK,	LR,	
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,	
			PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,	
								YU,											
			TJ.		•	•	•	•		•	•	·	·	•	•	•	•	•.	
		RW:	•		KE,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AT,	BE,	CH,	
								FR,									•		
			BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GO,	GW,	ML,	MR,	NE,	SN,	TD,	TG	
	EΡ	1359	800	•	•	A2	·	2003	1112		EP 2	002-	7283.	58 [.]	•	2	0020:	214	
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	BR 2002007259												7259			20	0020	214	
PRIO	RIORITY APPLN. INFO.:				. :														
											US 2001-269193P					P 20010215			
	•										WO 2002-US5734					W 20020214			

AB A stable, liquid concentrate herbicidal emulsion composition comprises a water-soluble

herbicide in a continuous aqueous phase and an oil-soluble herbicide in a discontinuous oil phase.

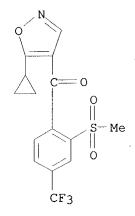
IT 141112-29-0, >, Isoxaflutole

RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)

(coformulations with water-soluble herbicides)

RN 141112-29-0 HCAPLUS

CN Methanone, (5-cyclopropyl-4-isoxazolyl) [2-(methylsulfonyl)-4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



SOURCE:

L16 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:770317 HCAPLUS

DOCUMENT NUMBER: 137:274345

TITLE: The residue behaviour of new herbicides in crop plants

AUTHOR(S): Storzer, Werner

CORPORATE SOURCE: Abteilung fuer Pflanzenschutzmittel und

Anwendungstechnik, Fachgruppe Chemische

Mittelpruefung, Biologische Bundesanstalt fuer Landund Forstwirtschaft, Braunschweig, D-38104, Germany Nachrichtenblatt des Deutschen Pflanzenschutzdienstes

(Braunschweig, Germany) (2002), 54(8), 193-203

CODEN: NDPBA6; ISSN: 0027-7479

PUBLISHER: Verlag Eugen Ulmer GmbH & Co.

DOCUMENT TYPE: Journal; General Review

LANGUAGE: German

A review. Results of the residue behavior of herbicides, growth regulators and safeners which were submitted in the national authorization procedure at the biol. research center of agriculture and forestry for the first time during the past ten years are presented comparatively. ingredients of the second half of the nineties are included as, new compds." in the evaluation procedure of the EU for inclusion in Annex I of the Directive 91/414/EC. The residue level in crops of treated plants basically depends on several factors which are, in particular, kind of uptake an distribution, speed of degradation processes in and on those plants, dilution of present residues by mass growth of the plants, and the application rate of the active compound per ha. It is shown in general that low residue levels are reached at harvest at the latest or in many cases no residues of the herbicides considered are detectable. Residue values determined in certain matrixes are not directly related to the application rates in each case. Rather more important in this connection are application conditions, kind of uptake and distribution within the plant. In this respect, no new results are obvious compared to the properties of herbicides which are in use for several decades. However, it can be

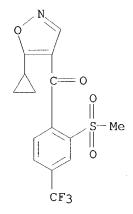
emphasized that most of the new active ingredients are applied in significantly lower rates than the average of common herbicides.

IT **141112-29-0**, Isoxaflutole

RL: AGR (Agricultural use); BSU (Biological study, unclassified); POL (Pollutant); BIOL (Biological study); OCCU (Occurrence); USES (Uses) (residue behavior of new herbicides in crop plants)

RN 141112-29-0 HCAPLUS

Methanone, (5-cyclopropyl-4-isoxazolyl)[2-(methylsulfonyl)-4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



CN

L16 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2000:367989 HCAPLUS

DOCUMENT NUMBER:

133:6158

TITLE:

Method and apparatus for preparation of unsymmetrical

ketones with high conversion and selectivity

INVENTOR(S):

Warren, Jack S.

PATENT ASSIGNEE(S):

Eagleview Technologies, Inc., USA

SOURCE:

PCT Int. Appl., 36 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

2

LANGUAGE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

									APPLICATION NO.						DATE 			
	WO	2000	0304	48		A1	_	2000	0602							1	9991	028
		W:	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH.	CN,	CU,	CZ,	DE,
			DK,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,
			ΚE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,
			MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,
			TR,	TT,	UA,	UG,	UZ,	VN,	YU,	ZA,	ZW,	AM,	AZ,	BY,	KG,	ΚZ,	MD,	RU,
			ТJ,	MT														
		RW:	GH,	GM,	KΕ,	LS,	MW,	SD,	SL,	SZ,	ΤZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,
			DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	ΙT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,
			CG,	CI,	CM,	GA,	GN,	G₩,	ML,	MR,	ΝE,	SN,	TD,	TG				
	US	6392	099			В1		2002	0521		US 1	999-	3945	83		1	99909	913
	CA	2321	720			AA		2000	0602		CA 1	.999-:	2321	720		1	9991	028
	EΡ	1056	341			A1		2000	1206		EP 1	999-	9586	96		1	9991	028
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	ΝL,	SE,	\mathtt{MC} ,	PT,
_								RO										
		6495									US 2	002-	1434	43		2	0020!	510
	US	2002	1936	38		A1		2002	1219									
PRIOF	RITY	APP:	LN.	INFO	.:						US 1	998-	1092	61P	1	P 1	9981:	119
											US 1	999-	3945	83	Ž	A 1	9990	913

WO 1999-US25372 W 19991028

AB The unsym. ketones (e.g., Me cyclopropyl ketone), useful as intermediates for numerous special chems. such as herbicidal or other agricultural compds, are continuously prepared by passing raw materials containing first acids (e.g., acetic acid), or aldehydes or their derivs., and second carboxy acids (e.g., cyclopropanecarboxylic acid) in the ratio 1:2 to 1:20 through a plurality of tube reactors, each having an inlet, an outlet and a catalytic bed (loaded catalysts, e.g., CeO2 and Al2O3) between inlet and outlet, at 350-500° and weight hourly space velocities ≥2; and separating the ketone.

IT 270917-64-1P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; method and apparatus for preparation of herbicidal or other agricultural compds.)

RN 270917-64-1 HCAPLUS

Methanone, (5-cyclopropyl-4-isoxazolyl)[2-(methylthio)-4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

CN

IT 141112-29-0P

RL: AGR (Agricultural use); BUU (Biological use, unclassified); IMF (Industrial manufacture); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of herbicidal or other agricultural compds.)

RN 141112-29-0 HCAPLUS

CN Methanone, (5-cyclopropyl-4-isoxazolyl)[2-(methylsulfonyl)-4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

1999:197521 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 131:1657

TITLE: A Simple Structure-Based Calculator for Estimating

Vapor Pressure

AUTHOR(S): Simmons, Kirk A. Discovery Research Department Agricultural Products CORPORATE SOURCE:

Group, FMC Corporation, Princeton, NJ, 08543, USA

Journal of Agricultural and Food Chemistry (1999), SOURCE:

47(4), 1711-1716

CODEN: JAFCAU; ISSN: 0021-8561

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal English LANGUAGE:

The development of an estimator for vapor pressure based upon organic functional groups is described. This vapor pressure calculator permits prediction of vapor pressure for a wide range of structural classes. The statistical quality of the derived coeffs. is presented as well as the quality of the prediction of the training set of compds. The calculator is then used to predict the vapor pressure of recently introduced agrochems. to illustrate its performance. The significance of

this calculator is that the agrochem. scientist can readily estimate the effects on vapor pressure of altering specific structural features of a mol.

TΤ 141112-29-0, RPA 201772

RL: PRP (Properties)

(calculator for estimating vapor pressure based on organic functional groups and prediction of vapor pressure of agrochems.)

RN 141112-29-0 HCAPLUS

CN Methanone, (5-cyclopropyl-4-isoxazolyl)[2-(methylsulfonyl)-4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

CF₃

REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

HCAPLUS COPYRIGHT 2004 ACS on STN L16 ANSWER 7 OF 10

1995:996288 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 124:146156

TITLE: Preparation of oxime-containing heterocyclic compounds

as agrochemical fungicides

Takase, Akira; Kai, Hiroyuki; Nishida, Kuniyoshi; INVENTOR(S):

Iwakawa, Tsuneo; Ueda, Kazuo; Masuko, Michio

PATENT ASSIGNEE(S): Shionogi and Co., Ltd., Japan

SOURCE:

PCT Int. Appl., 497 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	TENT NO.							APPLICATION NO.						DATE			
WO.	 9526956			A1	-	1995	1012	1	WO 1	995-	JP60	4		1	9950	330	
	W: AM.	AU,	BB,	BG,	BR,	BY,	CA,	CN,	CZ,	EE,	FI,	GE,	HU,	IS,	JP,	KG,	
	KR.	KZ.	LK.	LR.	LT.	LV,	MD,	MG,	MN,	MX,	NO,	NZ,	PL,	RO,	RU,	SG,	
						US,											
	RW: KE,	MW.	SD.	SZ,	UG,	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙE,	ΙΤ,	
	T.U.	MC.	NL.	PT.	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	ML,	MR,	NE,	
	SN.	TD.	TG														
CA	2186947	,		AA		1995	1012		CA 1	995-	2186	947		1	9950	330	
IIA	9520843			A1		1995	1023		AU 1	995-	2084	3		1	9950	330	
	685933																
	754684	19970122 EP 1995-913382							19950330								
- DI	R: AT,	BE.	CH.	DE.	DK.	ES.	FR.	GB,	GR,	IE,	IT,	LI,	LU,	MC,	NL,	PT,	SE
CN	1144524	22,	01.7	Α,	,	1997	0305	- ,	CN 1	995-	1923	24		1	9950	330	
				В		2002	1120										
	9507203			A		1997	0909		BR 1	995-	7203			1	9950	330	
						2000			US 1	996-	6932	24		1	9960	821	
						2001			US 1	999-	3702	55		1	9990	809	
	20020322					2002	0314					21			0001	204	
	6362212					2002											
	Y APPLN.								JP 1	994-	8781	9		A 1	9940	401	
INTORIT	1 111 1 13144	11110	• •						wo 1	995-	JP60	4		W 1	9950	330	
									US 1	996-	6932	24					
												55					
OMUDD O	OUDGE (C)			MAD	ייי ע כו	124.	1/61										

OTHER SOURCE(S):

MARPAT 124:146156

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$$R4$$

$$(CH2)nMR1$$

$$N \sim OR2$$

$$R3$$

The title compds. I [R1 represents optionally substituted aryl, optionally ΆB substituted heterocyclle, mono- or di-substituted methyleneamino, optionally substituted (substituted imino) methyl, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, substituted carbonyl or substituted sulfonyl; R2 represents alkyl, alkenyl, alkynyl or cycloalkyl; R3 represents optionally substituted heterocycle; R4 represents hydrogen, alkyl, alkoxy, halogen, nitro, cyano or haloalkyl; M represents oxygen, S(O)i (i being 0, 1 or 2), NR16 (R16 being hydrogen, alkyl or acyl) or a single bond; n represents 0 or 1, provided n represents 1 when R3 represents imidazol-1-yl or 1H-1,2,4-triazol-1-yl; and the wavy line represents the E form, Z form or a mixture thereof] are prepared A table containing 3140 compds. of this invention (including 293 compds. with data such m. p. or NMR data) and 36 synthetic examples dealing with the preparation of compds. of this invention are given in this document. In preventive tests, I [R1 = phenyl; R2 = methyl; R3 = imidazol-1-yl; R4 = H; M = O; n = 1] (m. p. 66 - 67.5°) at 500 ppm gave 90% control of Pyricularia oryzae, 100% control of Sphaerotheca fuliginea, and 100% control of Botrytis cinerea.

IT 173304-87-5P 173304-88-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)

(preparation of oxime-containing heterocyclic compds. as agrochem.

fungicides)

RN 173304-87-5 HCAPLUS

Methanone, (3,5-dimethyl-4-isoxazolyl)[2-(phenoxymethyl)phenyl]- (9CI) CN

(CA INDEX NAME)

RN 173304-88-6 HCAPLUS

CN Methanone, (3,5-dimethyl-4-isoxazolyl)[2-[(2,4-

dimethylphenoxy)methyl]phenyl]- (9CI) (CA INDEX NAME)

L16 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1994:655784 HCAPLUS

DOCUMENT NUMBER:

121:255784

TITLE:

4-benzoylisoxazole herbicides

INVENTOR(S):

Musil, Tibor; Pettit, Simon Neil; Smith, Philip Henry

PATENT ASSIGNEE(S):

Rhone-Poulenc Agriculture Ltd., UK

SOURCE:

PCT Int. Appl., 84 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	ENT	NO.			KINI	O DA	ΤE		ΑI	PL	ICAT		DATE				
WO	9414	782			A1	19	94	0707	WC) 1	993-1	EP35	 37		1:	9931:	215
	W:	ΑU,	BB,	BG,	BR,	BY, C	Ά,	CZ,	FI, F	ΙU,	JP,	KR,	KΖ,	LK,	MG,	MW,	NO,
		ΝZ,	PL,	RO,	RU,	SD, S	K,	UA,	US								
	RW:	ΑT,	BE,	CH,	DE,	DK, E	S,	FR,	GB, G	SR,	ΙE,	ΙT,	LU,	MC,	NL,	PT,	SE
CA	2150	922			AA	19	94	0707	CF	1	993-	2150	922		1:	9931	215
ΑU	9458	106			A1	19	94	0719	JA	1 1	994-	5810	6		1:	9931	215
ΑU	6740	50			В2	19	96	1205									
EP	6746	29			A1	19	95	1004	EF	1	994-	9037	75		1	9931:	215

Pryor 09 890384

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19980708
     EP 674629
                           В1
         R: AT, BE, CH,
                          DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE
     BR 9307790
                           Α
                                  19951121
                                              BR 1993-7790
                                                                       19931215
                                  19960429
                                              HU 1995-1763
                                                                       19931215
     HU 72276
                           A2
     AT 168107
                           F.
                                  19980715
                                              AT 1994-903775
                                                                       19931215
     ZA 9309463
                           Α
                                  19950116
                                              ZA 1993-9463
                                                                       19931217
                                  19940713
                                              CN 1993-120759
                                                                       19931218
     CN 1089258
                           Α
     CN 1037437
                           В
                                  19980218
                                                                       19950619
     FI 9503021
                           Α
                                  19950619
                                              FI 1995-3021
     US 6323155
                           B1
                                  20011127
                                              US 1995-454370
                                                                       19951101
                                                                       20010928
     US 2002045551
                                  20020418
                                              US 2001-964370
                           A1
                                                                       19921218
PRIORITY APPLN. INFO.:
                                              GB 1992-26396
                                                                    Α
                                              GB 1993-10204
                                                                    Α
                                                                       19930518
                                                                    W 19931215
                                              WO 1993-EP3537
                                              US 1995-454370
                                                                    A3 19951101
OTHER SOURCE(S):
                          MARPAT 121:255784
GI
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$$\begin{array}{c|c} R & O & XR^3 \\ \hline N & O & R^1 & R_{n-1}^2 \end{array}$$

4-Benzoylisoxazoles [I; R = H, alkoxycarbonyl; R1 = alkyl, haloalkyl, (un)substituted cycloalkyl; R2 = halogen, optionally halogenated alkyl, alkenyl, (un)substituted alkynyl, (un)substituted Ph, etc.; R3 =represents S(0)qR7; R7 = alkyl, (un)substituted alkenyl or alkynyl, cycloalkyl, (un)substituted Ph, etc.; q = 0, 2; X = NR8; R8 = H, alkyl, (un)substituted alkenyl or alkynyl, cycloalkyl, (un)substituted Ph, etc.], useful as herbicides, are prepared and I-containing formulations presented. Thus, hydroxylamine hydrochloride was cyclocondensed with 1-[2-chloro-4-(methylsulfonylamino)phenyl]-3-cyclopropyl-2-ethoxymethylenepropane-1,3-dione, producing herbicide 4-[2-chloro-4-(methylsulfonylamino)benzoyl]-5-cyclopropylisoxazole, m.p. 122.8-124.5°.

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IT 158579-21-6 158579-22-7 158579-24-9 158579-25-0 158579-26-1 158579-27-2 158579-28-3 158579-29-4 158579-30-7 158579-32-9 158579-34-1 158579-35-2 158579-38-5 158579-40-9 158579-41-0 158579-42-1 158579-43-2 158579-44-3 158579-45-4 158579-50-1 158579-51-2 158579-52-3 158579-53-4 158579-54-5 158579-55-6 158579-56-7 158579-57-8 158579-58-9 158579-59-0 158579-60-3 158579-61-4
```

RL: RCT (Réactant); RACT (Reactant or reagent) (agrochem. herbicide)

RN 158579-21-6 HCAPLUS

CN Methanesulfonamide, N-[3-chloro-4-[(5-cyclopropyl-4-isoxazolyl)carbonyl]phenyl]- (9CI) (CA INDEX NAME)

RN 158579-22-7 HCAPLUS

Methanesulfonamide, N-[3-chloro-4-[(5-cyclopropyl-4-isoxazolyl)carbonyl]phenyl]-N-methyl- (9CI) (CA INDEX NAME)

CN-

RN 158579-24-9 HCAPLUS

CN Methanesulfonamide, N-[5-chloro-2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]phenyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 158579-25-0 HCAPLUS

CN Methanesulfonamide, N-[2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-5-nitrophenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 158579-26-1 HCAPLUS

CN Methanesulfonamide, N-[4-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-3-nitrophenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 158579-27-2 HCAPLUS

CN Methanesulfonamide, N-[2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-5-methylphenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 158579-28-3 HCAPLUS

CN

CN

Methanesulfonamide, N-[5-chloro-2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]phenyl]-N-propyl- (9CI) (CA INDEX NAME)

RN 158579-29-4 HCAPLUS

Methanesulfonamide, N-[2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-5-(methylsulfonyl)phenyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 158579-30-7 HCAPLUS

CN Methanesulfonamide, N-[2,3-dichloro-6-[(5-cyclopropyl-4-isoxazolyl)carbonyl]phenyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 158579-32-9 HCAPLUS

CN Methanesulfonamide, N-[2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]phenyl]-N-phenyl- (9CI) (CA INDEX NAME)

RN 158579-34-1 HCAPLUS

CN Methanesulfonamide, N-[2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-5-(methylsulfonyl)phenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 158579-35-2 HCAPLUS

CN Ethanesulfonamide, N-[5-chloro-2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]phenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 158579-38-5 HCAPLUS

CN Methanesulfonamide, N-[3-bromo-4-[(5-cyclopropyl-4-isoxazolyl)carbonyl]phenyl]-N-methyl- (9CI) (CA INDEX NAME)

CN

RN 158579-40-9 HCAPLUS

Methanesulfonamide, N-[2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-5-(trifluoromethoxy)phenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 158579-41-0 HCAPLUS

CN Methanesulfonamide, N-[4-chloro-2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]phenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 158579-42-1 HCAPLUS

CN Methanesulfonamide, N-[4-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-3-fluorophenyl]-N-methyl- (9CI) (CA INDEX NAME)

CN

CN

RN 158579-43-2 HCAPLUS

Methanesulfonamide, N-[6-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-2,3-difluorophenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 158579-44-3 HCAPLUS

Methanesulfonamide, N-[2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-4,5-difluorophenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 158579-45-4 HCAPLUS

CN Methanesulfonamide, N-[2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-5-iodophenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 158579-47-6 HCAPLUS

CN 1-Propanesulfonamide, N-[5-chloro-2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]phenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 158579-48-7 HCAPLUS

CN Benzenesulfonamide, N-[5-chloro-2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]phenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 158579-49-8 HCAPLUS

CN Benzenemethanesulfonamide, N-[5-chloro-2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]phenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 158579-50-1 HCAPLUS

CN 2-Propanesulfonamide, N-[5-chloro-2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]phenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 158579-51-2 HCAPLUS

CN Methanesulfonamide, N-[5-chloro-2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]phenyl]-N-methoxy- (9CI) (CA INDEX NAME)

RN 158579-52-3 HCAPLUS

CN 3-Isoxazolecarboxylic acid, 5-cyclopropyl-4-[2-[methyl(methylsulfonyl)amino]-4-(trifluoromethyl)benzoyl]-, ethyl ester (9CI) (CA INDEX NAME)

RN 158579-53-4 HCAPLUS CN Methanesulfonamide, N

Methanesulfonamide, N-[5-chloro-2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]phenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 158579-54-5 HCAPLUS

CN Methanesulfonamide, N-[2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]phenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 158579-55-6 HCAPLUS

CN Methanesulfonamide, N-[2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-5-(trifluoromethyl)phenyl]-N-ethyl-(9CI) (CA INDEX NAME)

RN 158579-56-7 HCAPLUS CN Methanesulfonamide, N

Methanesulfonamide, N-[5-bromo-2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]phenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 158579-57-8 HCAPLUS

CN 3-Isoxazolecarboxylic acid, 4-[4-chloro-2-[methyl(methylsulfonyl)amino]ben zoyl]-5-cyclopropyl-, ethyl ester (9CI) (CA INDEX NAME)

RN 158579-58-9 HCAPLUS

CN Ethanesulfonamide, N-[2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-5- [methyl(methylsulfonyl)amino]phenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 158579-59-0 HCAPLUS

Ethanesulfonamide, N-[2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-5-fluorophenyl]-N-methyl- (9CI) (CA INDEX NAME)

CN

CN

RN 158579-60-3 HCAPLUS

Methanesulfonamide, N-[2-chloro-6-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-3-(trifluoromethoxy)phenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 158579-61-4 HCAPLUS

CN Methanesulfonamide, N-[5-chloro-2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]phenyl]-N-(2-methylpropyl)- (9CI) (CA INDEX NAME)

```
158579-21-6P 158579-22-7P 158579-23-8P
ΙT
     158579-24-9P 158579-25-0P 158579-26-1P
     158579-27-2P 158579-28-3P 158579-29-4P
     158579-30-7P 158579-31-8P 158579-32-9P
     158579-33-0P 158579-34-1P 158579-35-2P
     158579-36-3P 158579-37-4P 158579-38-5P
     158579-39-6P 158579-40-9P 158579-41-0P
     158579-42-1P 158579-43-2P 158579-44-3P
     158579-45-4P 158579-46-5P 158579-47-6P
     158579-48-7P 158579-49-8P 158579-50-1P
     158579-51-2P 158579-52-3P 158579-57-8P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation of, as agrochem. herbicide)
RN
     158579-21-6 HCAPLUS
     Methanesulfonamide, N-[3-chloro-4-[(5-cyclopropyl-4-
CN
     isoxazolyl)carbonyl]phenyl]- (9CI) (CA INDEX NAME)
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RN 158579-22-7 HCAPLUS
CN Methanesulfonamide, N-[3-chloro-4-[(5-cyclopropyl-4-isoxazolyl)carbonyl]phenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 158579-23-8 HCAPLUS

CN Methanesulfonamide, N-[4-[(5-cyclopropyl-4-isoxazolyl)carbonyl]phenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 158579-24-9 HCAPLUS

CN Methanesulfonamide, N-[5-chloro-2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]phenyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 158579-25-0 HCAPLUS

CN Methanesulfonamide, N-[2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-5-nitrophenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 158579-26-1 HCAPLUS

CN Methanesulfonamide, N-[4-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-3-nitrophenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 158579-27-2 HCAPLUS

CN Methanesulfonamide, N-[2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-5-methylphenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN

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RN

CN

158579-28-3 HCAPLUS

Methanesulfonamide, N-[5-chloro-2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]phenyl]-N-propyl- (9CI) (CA INDEX NAME)

158579-29-4 HCAPLUS

Methanesulfonamide, N-[2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-5-(methylsulfonyl)phenyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 158579-30-7 HCAPLUS CN Methanesulfonamide,

Methanesulfonamide, N-[2,3-dichloro-6-[(5-cyclopropyl-4-isoxazolyl)carbonyl]phenyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN

CN

RN

CN

158579-31-8 HCAPLUS

Methanesulfonamide, N-[2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-5-(trifluoromethyl)phenyl]-N-methyl- (9CI) (CA INDEX NAME)

158579-32-9 HCAPLUS

Methanesulfonamide, N-[2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]phenyl]-N-phenyl- (9CI) (CA INDEX NAME)

phenyl- (9CI) (CA INDEX NAME)

RN 158579-33-0 HCAPLUS CN Methanesulfonamide,

Methanesulfonamide, N-[5-bromo-2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]phenyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 158579-34-1 HCAPLUS

CN Methanesulfonamide, N-[2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-5-(methylsulfonyl)phenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 158579-35-2 HCAPLUS

CN Ethanesulfonamide, N-[5-chloro-2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]phenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 158579-36-3 HCAPLUS

CN Methanesulfonamide, N,N'-[4-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-1,3-phenylene]bis[N-methyl- (9CI) (CA INDEX NAME)

RN 158579-37-4 HCAPLUS

CN Methanesulfonamide, N-[2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-5-fluorophenyl]-N-methyl-(9CI) (CA INDEX NAME)

RN 158579-38-5 HCAPLUS

CN Methanesulfonamide, N-[3-bromo-4-[(5-cyclopropyl-4-isoxazolyl)carbonyl]phenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 158579-39-6 HCAPLUS

CN Methanesulfonamide, N-[2-chloro-6-[(5-cyclopropyl-4-isoxazolyl)carbonyl]phenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 158579-40-9 HCAPLUS

CN Methanesulfonamide, N-[2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-5-(trifluoromethoxy)phenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 158579-41-0 HCAPLUS

CN Methanesulfonamide, N-[4-chloro-2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]phenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 158579-42-1 HCAPLUS

CN Methanesulfonamide, N-[4-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-3-fluorophenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 158579-43-2 HCAPLUS

CN Methanesulfonamide, N-[6-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-2,3-difluorophenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 158579-44-3 HCAPLUS

CN Methanesulfonamide, N-[2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-4,5-difluorophenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 158579-45-4 HCAPLUS

CN Methanesulfonamide, N-[2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-5-iodophenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 158579-46-5 HCAPLUS CN Methanesulfonamide, I

Methanesulfonamide, N-[5-chloro-2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]phenyl]-N-(1-methylpropyl)- (9CI) (CA INDEX NAME)

CN

RN 158579-47-6 HCAPLUS

1-Propanesulfonamide, N-[5-chloro-2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]phenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 158579-48-7 HCAPLUS

CN Benzenesulfonamide, N-[5-chloro-2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]phenyl]-N-methyl- (9CI) (CA INDEX NAME)

CN

RN 158579-49-8 HCAPLUS

Benzenemethanesulfonamide, N-[5-chloro-2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]phenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 158579-50-1 HCAPLUS CN 2-Propanesulfonamide

2-Propanesulfonamide, N-[5-chloro-2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]phenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 158579-51-2 HCAPLUS

CN Methanesulfonamide, N-[5-chloro-2-[(5-cyclopropyl-4-isoxazolyl)carbonyl]phenyl]-N-methoxy- (9CI) (CA INDEX NAME)

RN 158579-52-3 HCAPLUS

CN 3-Isoxazolecarboxylic acid, 5-cyclopropyl-4-[2-[methyl(methylsulfonyl)amino]-4-(trifluoromethyl)benzoyl]-, ethyl ester (9CI) (CA INDEX NAME)

RN 158579-57-8 HCAPLUS

CN 3-Isoxazolecarboxylic acid, 4-[4-chloro-2-[methyl(methylsulfonyl)amino]ben zoyl]-5-cyclopropyl-, ethyl ester (9CI) (CA INDEX NAME)

L16 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN ACCESSION NUMBER: 1994:217651 HCAPLUS

DOCUMENT NUMBER:

120:217651

TITLE:

4-(Benzoyl)isoxazole herbicides for weed control

INVENTOR(S):

Cain, Paul Alfred; Cramp, Susan Mary

PATENT ASSIGNEE(S):

Rhone-Poulenc Agriculture Ltd., UK

SOURCE:

Eur. Pat. Appl., 30 pp.

DOCUMENT TYPE:

CODEN: EPXXDW

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE		DATE
EP 560482 EP 560482	A1 B1	19930915 19970806	EP 1993-300816	19930204
			GB, GR, IE, IT, LI, LU,	NI DT CE
ZA 9300769	A	19930908	ZA 1993-769	19930204
CA 2088840	AA	19930913	CA 1993-709	19930204
CA 2088840	C	20031230		19930204
BR 9300324	A	19930914	BR 1993-324	19930204
CN 1076194	A	19930915	CN 1993-101488	19930204
CN 1057524	В	20001018	CN 1993-101400	19930204
AU 9332819	A1	19930916	AU 1993-32819	19930204
AU 664229	B2	19951109	110 1993 32019	19990204
HU 63543	A2	19930928	HU 1993-293	19930204
HU 217562	В	20000228	1333 233	13330204
JP 07258231	A2	19951009	JP 1993-17611	19930204
	B2	20020729	01 1330 17011	13330201
IL 104614	A1	19970415	IL 1993-104614	19930204
RO 112029	`B1	19970430	RO 1993-120	19930204
CZ 282051	В6	19970514	CZ 1993-132	19930204
PL 172002	В1	19970731	PL 1993-297644	19930204
AT 156483	E	19970815	AT 1993-300816	19930204
ES 2105098	Т3	19971016	ES 1993-300816	19930204
RU 2105761	C1	19980227	RU 1993-4513	19930204
SK 280521	В6	20000313	SK 1993-64	19930204
US 5650533	A	19970722	US 1995-458817	19950602
US 5656573	A	19970812	US 1995-460093	19950602
US 5747424	A	19980505	US 1997-848909	19970501
US 5859283	A	19990112	US 1998-22051	19980211
PRIORITY APPLN. INFO.:				A 19920312
				A 19890911
				A 19900810
				B2 19900911
				A 19901122
				A 19910805
				A 19910805
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				B2 19911112
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			US 1997-848909	A3 19970501

OTHER SOURCE(S):

MARPAT 120:217651

GΙ

$$\begin{array}{c|cccc}
R & O & R^2 \\
\hline
N & & & \\
R^3 & & \\
R^4 & & \\
\end{array}$$

The title compds. I [R = H, CO2R5; R5 = (un)branched (un)substitutedAΒ $C \le 6$ alkyl; R1 = Me, iso-Pr, cyclopropyl, 1-methylcyclopropyl; R2 = S(0) nR51; $R51 = (un)branched C \le 4 alkyl$; R3 = Cl, Br, F, (un)branched (un)substituted C≤4 alkyl or alkoxy, C≤6 alkenyl, etc.; R4 = Cl, Br, F, (un)branched (un)substituted $C \le 4$ alkyl, C \leq 4 alkoxy substituted by \geq 1 halogen atom(s), CN, etc.; n = 0-2], useful as herbicides for weed control (no data), are prepared and I-containing agrochem. formulations presented. Thus, 3-cyclpropyl-1-[3,4-difluoro-2-(methylsulfonyl)phenyl]-2ethoxymethylenepropane-1,3-dione was cyclized with hydroxylamine hydrochloride, producing 5-cyclopropyl-4-[3,4-difluoro-2-(methylsulfonyl)benzoyl]isoxazole, m.p. 115-118°. IT153555-85-2 153555-86-3 153555-87-4 153555-88-5 153555-89-6 153555-90-9 153555-91-0 153555-92-1 153555-93-2 153555-94-3 153555-95-4 153555-96-5 153555-97-6 153555-98-7 153556-00-4 153556-01-5 153556-02-6 153556-03-7 153556-04-8 153556-05-9 153556-06-0 153556-07-1 153556-08-2 153556-09-3 153556-11-7 153556-12-8 153556-13-9 153556-14-0 153556-15-1 153556-16-2 153556-17-3 153556-18-4 153556-19-5

RN 153555-85-2 HCAPLUS

Methanone, (5-cyclopropyl-4-isoxazolyl)[3,4-difluoro-2-(methylsulfonyl)phenyl]- (9CI) (CA INDEX NAME)

CN

RN

CN

RN

CN

CN

153555-87-4 HCAPLUS

Methanone, [4-bromo-3-methoxy-2-(methylthio)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

153555-88-5 HCAPLUS

Methanone, [4-bromo-3-methoxy-2-(methylsulfonyl)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 153555-89-6 HCAPLUS

Methanone, [4-chloro-3-methoxy-2-(methylthio)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

CN

CN

RN CN

RN 153555-90-9 HCAPLUS

Methanone, [4-chloro-3-methyl-2-(methylthio)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 153555-91-0 HCAPLUS

Methanone, [4-chloro-3-fluoro-2-(methylthio)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

153555-92-1 HCAPLUS

Benzoic acid, 3-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-2-(methylthio)-6-(trifluoromethyl)-, methyl ester (9CI) (CA INDEX NAME)

RN 153555-93-2 HCAPLUS CN Benzoic acid, 6-chlos

Benzoic acid, 6-chloro-3-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-2-(methylthio)-, methyl ester (9CI) (CA INDEX NAME)

RN

153555-94**-**3 HCAPLUS

CN Methanone, [4-bromo-3-chloro-2-(methylthio)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 153555-95-4 HCAPLUS

CN Methanone, [3-chloro-2-(methylthio)-4-(trifluoromethyl)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 153555-96-5 HCAPLUS

CN Methanone, [4-bromo-3-fluoro-2-(methylthio)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 153555-97-6 HCAPLUS

CN Methanone, [4-chloro-3-(1-methylethenyl)-2-(methylthio)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 153555-98-7 HCAPLUS

CN Methanone, (5-cyclopropyl-4-isoxazolyl)[3-methyl-2,4-bis(methylthio)phenyl]- (9CI) (CA INDEX NAME)

CN

CN

RN 153556-00-4 HCAPLUS

3-Isoxazolecarboxylic acid, 5-cyclopropyl-4-[3,4-dichloro-2-(methylthio)benzoyl]-, ethyl ester (9CI) (CA INDEX NAME)

RN 153556-01-5 HCAPLUS

Methanone, (5-cyclopropyl-4-isoxazolyl)[3,4-dichloro-2-(methylsulfinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 153556-02-6 HCAPLUS

CN Methanone, (5-cyclopropyl-4-isoxazolyl)[3,4-dichloro-2-(methylsulfonyl)phenyl]- (9CI) (CA INDEX NAME)

RN 153556-03-7 HCAPLUS

CN Methanone, [4-bromo-3-methoxy-2-(methylsulfinyl)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 153556-04-8 HCAPLUS

CN 3-Isoxazolecarboxylic acid, 5-cyclopropyl-4-[3,4-dichloro-2-(methylsulfinyl)benzoyl]-, ethyl ester (9CI) (CA INDEX NAME)

RN 153556-05-9 HCAPLUS

CN 3-Isoxazolecarboxylic acid, 5-cyclopropyl-4-[3,4-dichloro-2-(methylsulfonyl)benzoyl]-, ethyl ester (9CI) (CA INDEX NAME)

RN 153556-06-0 HCAPLUS CN Methanone, [4-chloro-

Methanone, [4-chloro-3-methoxy-2-(methylsulfinyl)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 153556-07-1 HCAPLUS CN Methanone, [4-chloro

Methanone, [4-chloro-3-methoxy-2-(methylsulfonyl)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 153556-08-2 HCAPLUS

CN Methanone, [4-chloro-3-fluoro-2-(methylsulfinyl)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

- RN 153556-09-3 HCAPLUS
- CN Methanone, [4-chloro-3-fluoro-2-(methylsulfonyl)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

- RN 153556-11-7 HCAPLUS
- CN Methanone, [4-chloro-3-methyl-2-(methylsulfonyl)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 153556-12-8 HCAPLUS

CN Methanone, [4-bromo-3-chloro-2-(methylsulfinyl)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 153556-13-9 HCAPLUS

CN Methanone, [4-bromo-3-chloro-2-(methylsulfonyl)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 153556-14-0 HCAPLUS

CN Benzoic acid, 6-chloro-3-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-2-(methylsulfinyl)-, methyl ester (9CI) (CA INDEX NAME)

RN 153556-15-1 HCAPLUS

CN Benzoic acid, 6-chloro-3-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-2-(methylsulfonyl)-, methyl ester (9CI) (CA INDEX NAME)

RN

153556-16-2 HCAPLUS Methanone, [3-chloro-2-(methylsulfonyl)-4-(trifluoromethyl)phenyl](5-CNcyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

153556-17-3 HCAPLUS RN

CN Methanone, [4-bromo-3-fluoro-2-(methylsulfinyl)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 153556-18-4 HCAPLUS

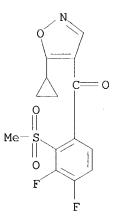
CN Methanone, [4-chloro-3-(1-methylethenyl)-2-(methylsulfinyl)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 153556-19-5 HCAPLUS

CN Methanone, [4-chloro-3-(1-methylethenyl)-2-(methylsulfonyl)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 153556-20-8 HCAPLUS
CN Methanone, [4-bromo-3-fluoro-2-(methylsulfonyl)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

153555-85-2P 153555-86-3P 153555-87-4P IT 153555-88-5P 153555-89-6P 153555-90-9P 153555-91-0P 153555-92-1P 153555-93-2P 153555-94-3P 153555-95-4P 153555-96-5P 153555-97-6P 153555-98-7P 153556-00-4P 153556-01-5P 153556-02-6P 153556-03-7P 153556-04-8P 153556-05-9P 153556-06-0P 153556-07-1P 153556-08-2P 153556-09-3P 153556-10-6P 153556-11-7P 153556-12-8P 153556-13-9P 153556-14-0P 153556-15-1P 153556-16-2P 153556-17-3P 153556-18-4P 153556-19-5P 153556-20-8P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (preparation and herbicidal activity of) 153555-85-2 HCAPLUS RN CN Methanone, (5-cyclopropyl-4-isoxazolyl)[3,4-difluoro-2-(methylsulfonyl)phenyl]- (9CI) (CA INDEX NAME)



RN

CN

153555-86-3 HCAPLUS Methanone, (5-cyclopropyl-4-isoxazolyl)[3,4-dichloro-2-(methylthio)phenyl]-

(9CI) (CA INDEX NAME)

CN

RN 153555-87-4 HCAPLUS

Methanone, [4-bromo-3-methoxy-2-(methylthio)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 153555-88-5 HCAPLUS

CN Methanone, [4-bromo-3-methoxy-2-(methylsulfonyl)phenyl](5-cyclopropyl-4-`isoxazolyl)- (9CI) (CA INDEX NAME)

RN 153555-89-6 HCAPLUS

CN Methanone, [4-chloro-3-methoxy-2-(methylthio)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 153555-90-9 HCAPLUS

CN Methanone, [4-chloro-3-methyl-2-(methylthio)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 153555-91-0 HCAPLUS

CN Methanone, [4-chloro-3-fluoro-2-(methylthio)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 153555-92-1 HCAPLUS

CN Benzoic acid, 3-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-2-(methylthio)-6-(trifluoromethyl)-, methyl ester (9CI) (CA INDEX NAME)

RN 153555-93-2 HCAPLUS

CN Benzoic acid, 6-chloro-3-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-2-(methylthio)-, methyl ester (9CI) (CA INDEX NAME)

RN 153555-94-3 HCAPLUS

CN Methanone, [4-bromo-3-chloro-2-(methylthio)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 153555-95-4 HCAPLUS

CN Methanone, [3-chloro-2-(methylthio)-4-(trifluoromethyl)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 153555-96-5 HCAPLUS

CN Methanone, [4-bromo-3-fluoro-2-(methylthio)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 153555-97-6 HCAPLUS CN Methanone, [4-chloro-

Methanone, [4-chloro-3-(1-methylethenyl)-2-(methylthio)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 153555-98-7 HCAPLUS

CN Methanone, (5-cyclopropyl-4-isoxazolyl)[3-methyl-2,4-bis(methylthio)phenyl]- (9CI) (CA INDEX NAME)

CN

CN

RN 153556-00-4 HCAPLUS

3-Isoxazolecarboxylic acid, 5-cyclopropyl-4-[3,4-dichloro-2-(methylthio)benzoyl]-, ethyl ester (9CI) (CA INDEX NAME)

RN 153556-01-5 HCAPLUS

Methanone, (5-cyclopropyl-4-isoxazolyl)[3,4-dichloro-2-(methylsulfinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 153556-02-6 HCAPLUS

CN Methanone, (5-cyclopropyl-4-isoxazolyl)[3,4-dichloro-2-(methylsulfonyl)phenyl]- (9CI) (CA INDEX NAME)

RN 153556-03-7 HCAPLUS

CN Methanone, [4-bromo-3-methoxy-2-(methylsulfinyl)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 153556-04-8 HCAPLUS CN 3-Isoxazolecarboxylic

3-Isoxazolecarboxylic acid, 5-cyclopropyl-4-[3,4-dichloro-2-(methylsulfinyl)benzoyl]-, ethyl ester (9CI) (CA INDEX NAME)

RN 153556-05-9 HCAPLUS

CN 3-Isoxazolecarboxylic acid, 5-cyclopropyl-4-[3,4-dichloro-2-(methylsulfonyl)benzoyl]-, ethyl ester (9CI) (CA INDEX NAME)

RN 153556-06-0 HCAPLUS

Methanone, [4-chloro-3-methoxy-2-(methylsulfinyl)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

CN

RN 153556-07-1 HCAPLUS

CN Methanone, [4-chloro-3-methoxy-2-(methylsulfonyl)phenyl](5-cyclopropyl-4-isoxazolyl)~ (9CI) (CA INDEX NAME)

RN 153556-08-2 HCAPLUS

CN Methanone, [4-chloro-3-fluoro-2-(methylsulfinyl)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 153556-09-3 HCAPLUS

CN Methanone, [4-chloro-3-fluoro-2-(methylsulfonyl)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 153556-10-6 HCAPLUS

CN Methanone, [4-chloro-3-methyl-2-(methylsulfinyl)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 153556-11-7 HCAPLUS

CN Methanone, [4-chloro-3-methyl-2-(methylsulfonyl)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 153556-12-8 HCAPLUS

CN Methanone, [4-bromo-3-chloro-2-(methylsulfinyl)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 153556-13-9 HCAPLUS

CN Methanone, [4-bromo-3-chloro-2-(methylsulfonyl)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 153556-14-0 HCAPLUS

CN Benzoic acid, 6-chloro-3-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-2-(methylsulfinyl)-, methyl ester (9CI) (CA INDEX NAME)

RN 153556-15-1 HCAPLUS

CN Benzoic acid, 6-chloro-3-[(5-cyclopropyl-4-isoxazolyl)carbonyl]-2-(methylsulfonyl)-, methyl ester (9CI) (CA INDEX NAME)

RN 153556-16-2 HCAPLUS

CN Methanone, [3-chloro-2-(methylsulfonyl)-4-(trifluoromethyl)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 153556-17-3 HCAPLUS

CN Methanone, [4-bromo-3-fluoro-2-(methylsulfinyl)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 153556-18-4 HCAPLUS

CN Methanone, [4-chloro-3-(1-methylethenyl)-2-(methylsulfinyl)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 153556-19-5 HCAPLUS

CN Methanone, [4-chloro-3-(1-methylethenyl)-2-(methylsulfonyl)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 153556-20-8 HCAPLUS

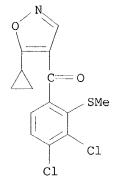
CN Methanone, [4-bromo-3-fluoro-2-(methylsulfonyl)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

IT 153555-86-3 153555-96-5

RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, in preparation of (benzoyl)isoxazole herbicides)

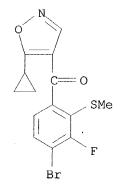
RN 153555-86-3 HCAPLUS

CN Methanone, (5-cyclopropyl-4-isoxazolyl)[3,4-dichloro-2-(methylthio)phenyl](9CI) (CA INDEX NAME)



RN 153555-96-5 HCAPLUS

CN Methanone, [4-bromo-3-fluoro-2-(methylthio)phenyl](5-cyclopropyl-4isoxazolyl) - (9CI) (CA INDEX NAME)



L16 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1994:134453 HCAPLUS

DOCUMENT NUMBER: 120:134453

TITLE: 4-(Benzoyl)isoxazole herbicides

INVENTOR(S): Cain, Paul Alfred; Cramp, Susan Mary

PATENT ASSIGNEE(S): Rhone-Poulenc Agriculture Ltd., UK

SOURCE: Eur. Pat. Appl., 21 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 560483	A1	19930915	EP 1993-300817	19930204
R: AT, BE, CH,	DE, DK	, ES, FR, GB	B, GR, IE, IT, LI, LU,	NL, PT, SE
ZA 9300770	A	19930908	ZA 1993-770	19930204
CA 2088839	AA	19930913	CA 1993-2088839	19930204
BR 9300323	A	19930914	BR 1993-323	19930204
AU 9332818	A1	19930916	AU 1993-32818	19930204
AU 658044	В2	19950330		
HU 63544	A2	19930928	HU 1993-294	19930204
CN 1076694	A	19930929	CN 1993-101487	19930204
JP 05255284	A2	19931005	JP 1993-17612	19930204
RO 112028 .	B1	19970430	RO 1993-121	19930204

Pryor 09 890384

PRIORITY APPLN. INFO.:	GB 1989-20519 GB 1990-17539 US 1990-580795 GB 1990-25469 GB 1991-16833 GB 1991-16835 US 1991-742381 US 1991-790175 US 1992-850031 US 1992-850128 US 1992-850424 US 1993-108792 US 1995-460093	A 19890911 A 19900810 B2 19900911 A 19901122 A 19910805 A 19910808 B2 19910112 B2 19920312 B2 19920312 B1 19930819 A 19950602
	US 1995-460093 US 1997-848909	A3 19950602 A3 19970501

OTHER SOURCE(S):

MARPAT 120:134453

GΙ

The title compds. I [R1 = (un)branched C1-4 alkyl, (un)substituted C3-4 cycloalkyl; R2 = halogen, R5, OR5, S(O)mR5, O(CH2)qOR5, CO2R5, NO2; R3 = halogen, R5, OR5, S(O)mR5, O(CH2)qOR5; R5 = (un)branched (un)substituted C1-4 alkyl; m = 0-2; q = 1-3; R4 = H, halogen, R5, OR5, S(O)mR5, O(CH2)qOR5, NO2], useful as herbicides for controlling the growth of weeds, are prepared and I-containing agrochem. formulations presented. Thus, 3-cyclopropyl-2-ethoxymethylene-1-[2-bromo-3-(2-methoxyethoxy)-4-(methylsulfonyl)phenyl]propan-1,3-dione was cyclized with hydroxylamine hydrochloride, producing I (R1 = cyclopropyl, R2 = Br, R3 = OCH2CH2OMe, R4 = MeSO2).

IT 152808-28-1P 152808-29-2P 152808-30-5P 152808-31-6P 152808-32-7P 152808-33-8P 152808-34-9P 152808-36-1P 152808-37-2P 152808-38-3P 152808-39-4P 152808-40-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and herbicidal activity of)

RN 152808-28-1 HCAPLUS

CN Methanone, [2-bromo-3-(2-methoxyethoxy)-4-(methylsulfonyl)phenyl] (5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 152808-29-2 HCAPLUS

CN Methanone, (5-cyclopropyl-4-isoxazolyl)[2,4-dibromo-3-(2-methoxyethoxy)phenyl]- (9CI) (CA INDEX NAME)

RN 152808-30-5 HCAPLUS

CN Methanone, [2-bromo-3-(2-methoxyethoxy)-4-(methylsulfonyl)phenyl][5-(1-methylcyclopropyl)-4-isoxazolyl]- (9CI) (CA INDEX NAME)

RN 152808-31-6 HCAPLUS

CN Methanone, [2-bromo-3-(2-methoxyethoxy)-4-(methylsulfonyl)phenyl](5-methyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 152808-32-7 HCAPLUS

CN Methanone, [2-chloro-3-(2-methoxyethoxy)-4-(methylsulfonyl)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 152808-33-8 HCAPLUS

CN Methanone, [2-chloro-3-(2-methoxyethoxy)-4-(methylsulfonyl)phenyl][5-(1-methylethyl)-4-isoxazolyl]- (9CI) (CA INDEX NAME)

$$i-Pr$$
 $C=0$
 $C1$
 $O-CH_2-CH_2-OMe$
 $O=S-Me$
 O

RN 152808-34-9 HCAPLUS

CN

Methanone, [2-chloro-3-(2-methoxyethoxy)-4-(methylsulfonyl)phenyl](5-methyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 152808-36-1 HCAPLUS

CN Methanone, [4-bromo-3-(2-methoxyethoxy)-2-(methylsulfonyl)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 152808-37-2 HCAPLUS

CN Methanone, (5-cyclopropyl-4-isoxazolyl)[3-(2-methoxyethoxy)-2-(methylthio)phenyl]- (9CI) (CA INDEX NAME)

N 152808-38-3 HCAPLUS

CN Methanone, [2-bromo-3-(2-methoxyethoxy)-4-(methylsulfinyl)phenyl](5-

cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN 152808-39-4 HCAPLUS

CN Methanone, (5-cyclopropyl-4-isoxazolyl)[3-(2-methoxyethoxy)-2-(methylsulfinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 152808-40-7 HCAPLUS

CN Methanone, (5-cyclopropyl-4-isoxazolyl)[3-(2-methoxyethoxy)-2-(methylsulfonyl)phenyl]- (9CI) (CA INDEX NAME)

IT 152808-35-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological

study); PREP (Preparation)
 (preparation and herbicidal activity of, reaction of)
152808-35-0 HCAPLUS
Methanone, [2-bromo-3-(2-methoxyethoxy)-4-(methylthio)phenyl](5-cyclopropyl-4-isoxazolyl)- (9CI) (CA INDEX NAME)

RN

CN

=> []

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=> d stat que nos
L1
                 STR
L3
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L4
            554 SEA FILE=HCAPLUS ABB=ON
                                          PLU=ON
                                                   L3
L_5
          66069 SEA FILE=HCAPLUS ABB=ON
                                          PLU=ON
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                CONTROL (HERBICIDAL) "/CV OR WEEDICIDES/CV OR "GROWTH INHIBITORS
                  PLANT"/CV OR HERBICIDES/CV OR "HORMONES, PLANT"/CV OR
                MULCHES/CV OR WEED/CV)
          19756 SEA FILE=HCAPLUS ABB=ON
^{L6}
                                          PLU=ON
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                L/CV
          58647 SEA FILE=HCAPLUS ABB=ON
1.7
                                          PLU=ON
                                                   (HERBICIDES/CV OR "WEED
                CONTROL"/CV)
1.8
            215 SEA FILE=HCAPLUS ABB=ON
                                          PLU=ON
                                                   L4 AND (L5 OR L6 OR L7)
1.9
              3 SEA FILE=HCAPLUS ABB=ON
                                          PLU=ON
                                                   L8 AND ?CAPSUL?
L15
             12 SEA FILE=HCAPLUS ABB=ON
                                          PLU=ON
                                                   L4 AND AGROCHEM?
L16
             10 SEA FILE=HCAPLUS ABB=ON
                                          PLU=ON
                                                  L15 NOT L9
L17
              3 SEA FILE=HCAPLUS ABB=ON
                                          PLU=ON
                                                   L4 AND (CONTROL? OR SEQUEN?) (L
                ) (RELEASE OR DELIVER?)
L18
              1 SEA FILE=HCAPLUS ABB=ON
                                          PLU=ON
                                                 L17 NOT (L9 OR L16)
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=> d ibib abs hitstr 118 1

L18 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1998:787158 HCAPLUS

DOCUMENT NUMBER:

130:106455

TITLE:

The mode of action of isoxaflutole II.

Characterization of the inhibition of carrot 4-hydroxyphenylpyruvate dioxygenase by the diketonitrile derivative of isoxaflutole Viviani, F.; Little, J. P.; Pallett, K. E.

CORPORATE SOURCE:

Plant Science Research Department, Rhone-Poulenc

Agriculture Ltd., Ongar/Essex, CM5 OHW, UK

SOURCE:

AUTHOR(S):

Pesticide Biochemistry and Physiology (1998), 62(2),

125-134

CODEN: PCBPBS; ISSN: 0048-3575

PUBLISHER:

Academic Press

DOCUMENT TYPE:

Journal

LANGUAGE:

ΙT

RN

CN

English Isoxaflutole is a novel herbicide for broadleaf and grass weed

control in corn and sugarcane which acts by inhibiting 4-hydroxyphenylpyruvate dioxygenase (HPPD). In plants and soil, isoxaflutole is rapidly converted to a diketonitrile derivative (DKN) which is the active herbicide principle. The kinetics of inhibition of carrot HPPD in vitro by the DKN showed that it is a potent tight-binding inhibitor (IC50 4.9 ± 0.2 nM), exhibiting a time-dependent interactions with the enzyme in its ferrous state. DKN is a competitive inhibitor that rapidly inactivates the enzyme (with a constant rate of association of 0.2 ± 0.004 μM-1s-1) by forming a reversible complex that releases slowly the inhibitor in an unmodified form. The decarboxylation coupled with reduction of mol. oxygen is accepted as the first enzymic event of the HPPD-catalyzed reaction which occurs as 4-hyroxyphenylpyruvate binds to the internal iron of protein via its keto acid function. The DKN of isoxaflutole presents a β -(1.3)-diketone moiety, a delocalized π system which can mimic the keto acid functionality of the substrate and which is also well known for its iron-chelating properties. Since this inhibitor competes with the substrate for binding, it is highly probable that it chelates the ferrous iron in the active site strongly by forming a stable ion-dipole charge transfer complex that resembles the initial substrate-iron complex or an early reaction intermediate. The slow release of the inhibitor in an unmodified form also suggests that the mol. oxygen activation due to ferrous iron generating a powerful oxidant as the inhibitor-enzyme complex form is probably not occurring. (c) 1998 Academic Press.

141112-29-0, Isoxaflutole

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)

(characterization of the inhibition of carrot 4-hydroxyphenylpyruvate dioxygenase by the diketonitrile derivative of isoxaflutole)

141112-29-0 HCAPLUS

Methanone, (5-cyclopropyl-4-isoxazolyl)[2-(methylsulfonyl)-4-(trifluoromethyl)phenyl] - (9CI) (CA INDEX NAME)

24

Me CF3

REFERENCE COUNT:

THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT